ELP and Math Standards Alignment

Nebraska Mathematical Processes

Solves mathematical problems: Through the use of appropriate academic and technical tools, students will make sense of mathematical problems and persevere in solving them. Students will draw upon their prior knowledge in order to employ critical thinking skills, reasoning skills, creativity, and innovative ability. Additionally, students will compute accurately and determine the reasonableness of solutions.

Models and represents mathematical problems: Students will analyze relationships in order to create mathematical models given a real-world situation or scenario. Conversely, students will describe situations or scenarios given a mathematical model.

Communicates mathematical ideas effectively: Students will communicate mathematical ideas effectively and precisely. Students will critique the reasoning of others as well as provide mathematical justifications. Students will utilize appropriate communication approaches individually and collectively and through multiple methods, including writing, speaking, and listening.

Makes mathematical connections: Students will connect mathematical knowledge, ideas, and skills beyond the math classroom. This includes the connection of mathematical ideas to other topics within mathematics and to other content areas. Additionally, students will be able to describe the connection of mathematical knowledge and skills to their career interest as well as within authentic/real-world contexts.

Nebraska ELP Standards

Table 1. Organization of the ELP Standards in Relation to Participation in Content-Area Practices

1	construct meaning from oral presentations and literary and informational text through grade-appropriate listening, reading, and viewing		
2	participate in grade-appropriate oral and written exchanges of information, ideas, and analyses, responding to peer, audience, or reader comments and questions		
3	speak and write about grade-appropriate complex literary and informational texts and topics		
4	construct grade-appropriate oral and written claims and support them with reasoning and evidence		
5	conduct research and evaluate and communicate findings to answer questions or solve problems		
6	analyze and critique the arguments of others orally and in writing		
7	adapt language choices to purpose, task, and audience when speaking and writing		
8	determine the meaning of words and phrases in oral presentations and literary and informational text		
9	create clear and coherent grade-appropriate speech and text		
10	make accurate use of standard English to communicate in grade- appropriate speech and writing		

Standards 1 through 7 involve the language necessary for ELLs to engage in the central content-specific practices associated with ELA & Literacy, mathematics, and science. They begin with a focus on extraction of meaning and then progress to engagement in these practices.

Standards 8 through 10 home in on some of the more micro-level linguistic features that are undoubtedly important to focus on, but only in the service of the other seven standards.

Math Lesson Planning Template K-2 Rubric 3-12 Rubric

3-12 Rubric				
Grade Level	Lesson	Focus and Standards		
Kindergarten	Kindergarten Engaging Activity	Strand: Data Math Standard: 0.4.2 Analysis & Application ELP Standard: K.4 Construct grade-appropriate oral and written claims and support them with reasoning and evidence.		
1st Grade	Grade 1 Engaging Activity 1	Strand: Data Math Standard: 1.4.2 Analysis & Application ELP Standard: 1.2 Participate in grade-appropriate oral and written exchanges of information, ideas, and analysis, responding to peer, audience, or reader comments and questions.		
1st Grade	Grade 1 Engaging Activity 2	Strand: Algebra Math Standard: 1.2.3 Applications ELP Standard: 1.9 Create clear and coherent grade-appropriate speech and text		
2nd Grade	Grade 2 Engaging Activity	Strand: Geometry Math Standard: 2.3.1 Characteristics ELP Standard: 2-3.4 Construct grade appropriate oral and written claims and support them with reasoning and evidence.		
3rd Grade	Grade 3 Engaging Activity 1	Strand: Algebra Math Standard: 3.2.2 Algebraic Processes ELP Standard: 2-3.5 Conduct research and evaluate and communicate findings to answer questions or solve problems.		
3rd Grade	Grade 3 Engaging Activity 2	Strand: Geometry Math Standard: 3.3.3 Measurement ELP Standard: 2-3.3 Participate in grade-appropriate oral and written exchanges of information, ideas, and analyses, responding to peer, audience, or reader comments and questions.		
4th Grade	Grade 4 Engaging Activity 1	Strand: Geometry Math Standard: 4.3.1 Geometric characteristics ELP Standard: 4-5.3 Speak and write about grade-appropriate complex literary and informational texts and topics; ELP Standard 4-5.8 Determine the meaning of words and phrases in oral presentations and literary and informational text		
4th Grade	Grade 4 Engaging Activity 2	Strand: Number Math Standard: 4.1.1 Numeric Relationships ELP Standard: 4-5.4 Construct grade-appropriate oral and written claims and support them with reasoning and evidence;		

		ELP Standard: 4-5.6 Analyze and critique the arguments of others orally and in writing.
5th Grade	Grade 5 Engaging Activity 1	Strand: Number Math Standard: 5.1.1 Numeric Relationships ELP Standard: 4-5.2 Participate in grade-appropriate oral and written exchanges of information, ideas, and analyses, responding to peer, audience, or reader comments and questions; ELP Standard: 4-5.7 Adapt language choices to purpose, task, and audience when speaking and writing.
5th Grade	Grade 5 Engaging Activity 2	Strand: Algebra Math Standard: 5.2.3 Applications ELP Standard: 4-5.2 Participate in grade-appropriate oral and written exchanges of information, ideas, and analyses, responding to peer, audience, or reader comments and questions.
6th Grade	Grade 6 Engaging Activity 1	Strand: Number Math Standard: 6.1.1 Numeric Relationships ELP Standard: 6-8.4 Participate in grade-appropriate oral and written exchanges of information, idea, and analyses, responding to peer, audience, or reader comments and questions.
6th Grade	Grade 6 Engaging Activity 2	Strand: Geometry Math Standard: 6.3.3 Measurement ELP Standard: 6-8.5 Conduct research and evaluate and communicate findings to answer questions or solve problems.
7th Grade	Grade 7 Engaging Activity	Strand: Geometry Math Standard: 7.3.3 Measurement ELP Standard: 6-8.2 Participate in grade-appropriate oral and written exchanges of information, ideas, and analyses, responding to peer, audience, or reader comments and questions.
8th Grade	Grade 8 Engaging Activity	Strand: Algebra Math Standard: 8.2.3 Applications ELP Standard: 6-8.4 Construct grade-appropriate oral and written claims and support them with reasoning and evidence.
High School	Algebra Engaging Activity	Strand: Algebra Math Standard: 11.2.3 Applications ELP Standard: 9-12.4 Construct grade-appropriate oral and written claims and support them with reasoning and evidence.
High School	Data Engaging Activity	Strand: Data Math Standard: 11.4.2 Analysis & Applicants ELP Standard: 9-12.4 Construct grade-appropriate oral and written claims and support them with reasoning and evidence; ELP Standard: 9-12.5 Conduct research and evaluate and communicate findings to answer questions or solve problems.
High School	HS Advanced Topics	Strand: Number Math Standard: 12.1 Numeric Relationships ELP Standard: 9-12.4 Construct grade-appropriate oral and written claims and support them with reasoning and evidence.